



SOD1 Polyclonal Antibody

E90274

Catalog Number: E90274**Amount:** 100ul

Background: SOD1, Cu/Zn superoxide dismutase, is a major antioxidant enzyme that catalyzes the conversion of superoxide anion to hydrogen peroxide and molecular oxygen (1). SOD1 is ubiquitously expressed and is localized in the cytosol, nucleus and mitochondrial intermembrane space. The SOD1 gene locus is on chromosome 21 in a region affected in Down Syndrome (2). In addition, over 100 distinct SOD1 inherited mutations have been identified in the familial form of amyotrophic lateral sclerosis (ALS), a progressive degenerative disease of motor neurons (3-5). Despite the fact that SOD1 helps to eliminate toxic reactive species, its mutations in ALS have been described as gain-of-function (5). The mechanism by which mutant SOD1 induces the neurodegeneration observed in ALS is still unclear. Mutant SOD1 proteins become misfolded and consequently oligomerize into high molecular weight species that aggregate and end up in proteinaceous inclusions (5).

Species: Rabbit**Isotype:** IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

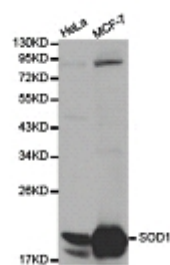
Synonyms: SOD1;ALS;ALS1;IPOA;SOD;homodimer ;**Immunogen:** Recombinant protein of human SOD1**Purification:** Affinity purification**Reactivity:** H M R**Applications:** WB IHC**Molecular Weight:** 16kDa**Swiss-Prot No. :** P00441**Gene ID:** 6647

References: 1. McCord, J.M. and Fridovich, I. (1988) Free Radic Biol Med 5, 363-9. 2. Sherman, L. et al. (1983) Proc Natl Acad Sci USA 80, 5465-9. 3. Rosen, D.R. et al. (1993) Nature 362, 59-62. 4. Deng, H.X. et al. (1993) Science 261, 1047-51. 5. Valentine, J.S. and Hart, P.J. (2003) Proc Natl Acad Sci USA 100, 3617-22.

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WB 1:500 - 1:2000

IHC 1:50- 1:200



Western blot analysis of extracts of HeLa and MCF7 cells, using SOD1 antibody.